Amendments to the Claims

A listing of the entire set of pending claims (including amendments to the claims) is submitted herewith per 37 CFR 1.121. This listing of claims will replace all prior versions and listings of claims in the application.

1. (Currently amended) A method of decentralized medium access control in a communications network consisting of a plurality of stations, wherein a sending station transmits a reservation request for a future transmission to an intended receiving station, ~~said~~ the intended receiving station being in a reception range of ~~said~~ the sending station, the method comprising:

transmitting ~~said~~ the reservation request ~~signalling~~ signaling reservation information including a starting point and duration of the future transmission, thereby defining a time period of ~~said~~ the future transmission, and, in case of a multi-channel system, further including a frequency or code of the channel of ~~said~~ the future transmission, [[so]] thereby establishing a reservation, and

overhearing the reservation request by stations active in ~~said~~ the reception range, such that ~~overhear said reservation request and other~~ stations other than ~~said~~ the intended receiving station ~~perform the actions of storing said~~ store the reservation information locally and defer from medium access during the time period and on the channel of the future transmission.

2. (Currently amended) The method of claim 1, wherein ~~said~~ the intended receiving station acknowledges ~~said~~ the reservation request by returning [[a]] an acknowledgement message repeating ~~said~~ the reservation information; and ~~other~~ stations other than the intended receiving station active in the reception range for transmissions of ~~said~~ the intended receiving station perform the actions of storing ~~said~~ the reservation information locally and defer from medium access during the time period and on the channel of the future transmission upon overhearing ~~said~~ the acknowledgement message.

3. (Currently amended)   The method of claim 1, wherein ~~said~~ the reservation request is transmitted piggy-back to a data packet in a frame or in another ~~signalling~~ signaling frame.

4.   (Currently amended)   The method of claim 3, wherein an [[said]] acknowledgement message is transmitted piggy-back in an acknowledgement frame of ~~said~~ the data packet or another data packet.

5. (Currently amended)   The method of claim 1, wherein ~~said~~ the reservation request includes information on the priority or priority class of ~~said~~ the future transmission, ~~said~~ the priority information being used in that active stations in ~~said~~ the reception range of ~~said~~ the sending station replace an existing reservation information stored for the ~~respective~~ time period by new reservation information of a most recently received reservation request, if the existing reservation request has a lower priority than the most recently received reservation request; and the station that has been previously allocated the channel for the ~~respective~~ time period withdraws or delays its future transmission, if the most recently received reservation has a higher priority.

6. (Currently amended)   The method of claim 1, wherein an [[said]] acknowledgement message includes information on the priority or priority class of ~~said~~ the future transmission, ~~said~~ the priority information being used in that active stations in ~~said~~ the reception range of ~~said~~ the intended receiving station replace an existing reservation information stored for the ~~respective~~ time period by new reservation information of a most recently received reservation request,

if the existing reservation request has a lower priority than the most recently received reservation request; and

that station that has been previously allocated the channel for the ~~respective~~ time period withdraws or delays its future transmission, if the most recently received reservation has a higher priority.

7. (Currently amended)   The method of claim 1, wherein several periodic transmissions are ~~signalled~~ signaled by a single reservation request and a time period derived from reservation information of a reservation request of a first future transmission being interpreted as a period also of the following future transmissions, and stations active in ~~said~~ the reception range overhear ~~said~~ the reservation request and ~~other~~ stations other than ~~said~~ the intended receiving station ~~perform the actions of storing said~~ store the reservation information locally and defer from medium access during all ~~signalled~~ signaled time periods on all respective channels of the future transmissions.

8. (Currently amended)   The method of claim 1, wherein the signaled starting point of ~~said~~ the future transmission is defined ~~relatively~~ relative to a specific point in time associated with the reservation request message~~, like e.g. the beginning or end of the sending time or the beginning or end of the time slot of said reservation request,~~ so that no global synchronization of clocks is required.

9. (Currently amended)   The method of claim 1, wherein [[said]] a specific point in time, which serves as reference point for the definition of the starting time of the future transmission, is defined ~~relatively~~ relative to the beginning of the reservation request message and ~~signalled~~ signaled inside the reservation request message.

10. (Currently amended)   The method of claim 2, wherein the starting point of the future transmission ~~signalled~~ signaled in the acknowledgement message is defined ~~relatively~~ relative to the beginning or end of the sending time or the beginning or end of the time slot as a time base of ~~said~~ the acknowledgement message and adapting starting point information from ~~said~~ the sending station to the time base of ~~said~~ the acknowledgement message.

11. (Original)   The method of claim 1, wherein collisions of reservation requests are resolved by a collision resolution mechanism.

12. (Original)   The method of claim 1, wherein a reservation request of shorter duration of transmission replaces an existing reservation of longer duration of transmission.

13. (Original)   The method of claim 1, wherein reservation information of a most recent reservation request replaces an existing reservation if the most recent reservation request has an earlier due time than the existing information.

14. (Currently amended)   The method of claim 1, wherein ~~said~~ the sending station transmits a revocation message to ~~said~~ the intended receiving station for the purpose of deleting one or several of its reservation requests; and stations active in the reception range for transmissions of ~~said~~ the sending station overhear ~~said~~ the revocation message and ~~other~~ stations other than ~~said~~ the intended receiving station locally delete the corresponding reservation information.

15. (Currently amended)   The method of claim 1, wherein ~~said~~ the intended receiving station acknowledges ~~said~~ the revocation message by returning a message repeating ~~said~~ the revocation information; and ~~other~~ stations other than the intended receiving station active in the reception range for transmissions of ~~said~~ the intended receiving station perform the actions of locally deleting the reservation information corresponding to the revocation information.

16. (Currently amended)   The method of claim 1, wherein a station broadcasts a copy of its locally stored reservation information; and stations active in the reception range for transmissions of ~~said~~ the station compare the received reservation information with their locally stored information and add missing reservations to their locally stored reservation information.

17. (Currently amended)   A communications network consisting of a plurality of stations, ~~including~~ comprising:

a sending station which transmits a reservation request for a future transmission; ~~to an intended receiving station, said~~

an intended receiving station, being in a reception range of ~~said~~ the sending station, for receiving the reservation request to establish a reservation, ~~said~~ wherein the reservation request ~~signalling~~ signaling reservation information includes a ~~including~~ starting point and duration of the transmission, thereby defining a time period of ~~said~~ the future transmission, and, in case of a multi-channel system, frequency or code of the channel of ~~said~~ the future transmission; ~~so establishing a reservation,~~ and

stations, other than the intended receiving station, active in ~~said~~ the reception range which overhear ~~said~~ the reservation request, for ~~wherein other stations than said intended receiving station perform the actions of~~ storing ~~said~~ the reservation information locally and deferring ~~defer~~ from medium access during the time period and on the channel of the future transmission.

18. (Currently amended)   The communications network of claim 17, ~~characterized in that~~ wherein ~~said~~ the intended receiving station acknowledges ~~said~~ the reservation request by returning [[a]] an acknowledgement message repeating ~~said~~ the reservation information; and ~~other~~ stations other than the intended receiving station active in the reception range for transmissions of ~~said~~ the intended receiving station perform the actions of storing ~~said~~ the reservation information locally and defer from medium access during the time period and on the channel of the future transmission upon overhearing ~~said~~ the acknowledgement message.

19. (Currently amended)   The communications network of claim 17, ~~characterized in that~~ wherein ~~said~~ the reservation request includes information on the priority or priority class of ~~said~~ the future transmission, ~~said~~ the priority information being used in that active stations in ~~said~~ the reception range of ~~said~~ the sending station replace an existing reservation information stored for the ~~respective~~ time period by new reservation information of a most recently received reservation request, if the existing reservation request has a lower priority than the most recently received reservation

request; and the station that has been previously allocated the channel for the ~~respective~~ time period withdraws or delays its future transmission, if the most recently received reservation has a higher priority.

20. (Currently amended) The communications network of claim 17, ~~characterized in that~~ wherein an [[said]] acknowledgement message includes information on the priority or priority class of ~~said~~ the future transmission, ~~said~~ the priority information being used in that active stations in ~~said~~ the reception range of ~~said~~ the intended receiving station replace an existing reservation information stored for the ~~respective~~ time period by new reservation information of a most recently received reservation request, if the existing reservation request has a lower priority than the most recently received reservation request; and that station that has been previously allocated the channel for the ~~respective~~ time period withdraws or delays its future transmission, if the most recently received reservation has a higher priority.

21. (Currently amended) The communications network of claim 17, ~~characterized in that~~ wherein several periodic transmissions are signaled by a single reservation request wherein a time period derived from reservation information of a reservation request of a first future transmission being interpreted as period also of the following future transmissions, and stations active in ~~said~~ the reception range overhear ~~said~~ the reservation request and ~~other~~ stations other than ~~said~~ the intended receiving station perform the actions of storing ~~said~~ the reservation information locally and defer from medium access during all ~~signalled~~ signaled time periods on all respective channels of the future transmissions.

22. (Currently amended) The communications network of claim 17, ~~characterized in that~~ wherein [[-]]~~said~~ the sending station transmits a revocation message to ~~said~~ the intended receiving station for the purpose of deleting one or several of its reservation requests; and stations active in the reception range for transmissions of ~~said~~ the sending station overhear ~~said~~ the revocation message and ~~other~~ stations

other than ~~said~~ the intended receiving station locally delete the corresponding reservation information.

23. (Currently amended)   The communications network of claim 17, ~~characterized in that~~ wherein [[-]]~~said~~ the intended receiving station acknowledges ~~said~~ the revocation message by returning a message repeating ~~said~~ the revocation information; and ~~other~~ stations other than the intended receiving station active in the reception range for transmissions of ~~said~~ the intended receiving station perform the actions of locally deleting the reservation information corresponding to the revocation information.

24. (Currently amended)   The communications network of claim 17, ~~characterized in that~~ wherein a station broadcasts a copy of its locally stored reservation information; and stations active in the reception range for transmissions of ~~said~~ the station compare the received reservation information with their locally stored information and add missing reservations to their locally stored reservation information.

25. (Currently amended)   A station which transmits a reservation request for a future transmission to an intended receiving station, thereby establishing a reservation, ~~said~~ the reservation request comprising ~~signalling~~ signaling reservation information including a starting point and duration of the transmission, defining a time period of ~~said~~ the future transmission, and, in case of a multi-channel system, frequency or code of the channel of ~~said~~ the future transmission~~, so establishing a reservation~~.